

(FILE 'HOME' ENTERED AT 16:26:36 ON 08 APR 2003)

FILE 'REGISTRY' ENTERED AT 16:27:02 ON 08 APR 2003

L1 11475 S 629-11-8/CRN OR 556-48-9/CRN  
L2 1842 S L1 AND PC/PCT  
L3 2 S 629-11-8/RN OR 556-48-9/RN

FILE 'CA' ENTERED AT 16:29:48 ON 08 APR 2003

L4 6 S L2 AND GOLF?  
L5 5 S L1 AND GOLF? NOT L4  
L6 0 S L3 AND GOLF? NOT (L4 OR L5)  
L7 840 S L2 AND (POLYURETHANE? OR URETHANE?) NOT (L4 OR L5)  
L8 178 S L7 AND (PREPOLYMER? OR PRE)

L4 ANSWER 6 OF 6 CA COPYRIGHT 2003 ACS  
 AN 129:16997 CA  
 TI Multiple piece solid **golf** balls  
 IN Moriyama, Keiji; Asakura, Takeshi; Hiraoka, Hideki  
 PA Sumitomo Rubber Industries Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM A63B037-00  
 ICS A63B037-04; A63B037-12; C08L023-26; C08L075-04  
 CC 39-15 (Synthetic Elastomers and Natural Rubber)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10108923	A2	19980428	JP 1997-220340	19970815
PRAI	JP 1996-215730		19960815		

AB **Golf** balls having good hit feeling and carry comprise a core, .gtoreq.1 interlayer contg. 10-100% polyurethane thermoplastic elastomers and 0-90% ethylene-(meth)acrylic acid ionomers (I) having flexural modulus 1500-5000 kg/cm<sup>2</sup>, and a cover of I having Shore D hardness 50-75. Thus, a core comprised BR 18 100, Zn acrylate 26, dicumyl peroxide 1.0, ZnO 31, and Yoshinox 425 (II) 0.5 part, an interlayer comprised Pandex T 7890N, and a cover comprised Himilan 1605 50, Himilan 1706 50, Ti oxide 2, Ba sulfate 2, and II 0.2 part.

ST ionomer polyurethane rubber **golf** ball; cover **golf** ball; core **golf** ball; interlayer **golf** ball

IT Ionomers  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (covers; multiple piece **golf** balls having good hit feeling and carry)

IT Urethane rubber, properties  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (interlayers, Pandex T 2983N; multiple piece **golf** balls having good hit feeling and carry)

IT **Golf** balls  
 (multiple piece **golf** balls having good hit feeling and carry)

IT Butadiene rubber, preparation  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (of cis-1,4-configuration, JSR-BR 18, reaction products with zinc acrylate; multiple piece **golf** balls having good hit feeling and carry)

IT 25608-26-8, Himilan 1605  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (Himilan 1605, covers; multiple piece **golf** balls having good hit feeling and carry)

IT 28516-43-0, Himilan 1706  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (Himilan 1706, covers; multiple piece **golf** balls having good hit feeling and carry)

IT 103339-33-9P, Butadiene-zinc acrylate copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(cores; multiple piece **golf** balls having good hit feeling and carry)

IT 205830-56-4, Pandex T 7890N

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(interlayers; multiple piece **golf** balls having good hit feeling and carry)

IT 9003-17-2P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(cis-1,4-Butadiene rubber, JSR-BR 18, reaction products with zinc acrylate; multiple piece **golf** balls having good hit feeling and carry)